Amendments to the Claims:

This listing of claims will replace all prior versions,
and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (canceled)

Claim 10 (new): A method of monitoring activity of a
subject comprising:

measuring, at a point on the subject, simultaneous
movement in two or more directions, at each of a
plurality of times during a time period;

calculating a first vector magnitude from a first
simultaneously measured movement at a first of the
plurality of times during the time period;

calculating a second vector magnitude from a second
simultaneously measured movement at a second of the
plurality of times during the time period;

storing in a memory of an activity monitor attached

to the subject, first and second values corresponding,

respectively, to the first vector magnitude and the

second vector magnitude; and

determining an activity level of the subject for

the time period from, at least, the first and second

stored values.

Claim 11 (new):   The method of claim 10, wherein the

movement is measured by accelerometer, the movement

directions are orthogonal x-. y- and z- directions and

the first vector magnitude and the second vector

magnitude are determined according to the following

expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in

respective x-. y- and z- directions and a is the

magnitude of the resultant vector of such movement.

Claim 12 (new):   The method of claim 11 wherein a

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plurality of stored values are used to determine the activity level and each of the plurality of stored values corresponds to a vector magnitude.

Claim 13 (new):   The method of claim 12 wherein the step of determining the activity level comprises summing time integrals of the plurality of stored values.

Claim 14 (new):   The method of claim 10 wherein the step of determining the activity level comprises summing time integrals of the first and second vector magnitudes.

Claim 15 (new):   The method of claim 10 wherein the step of calculating a first vector magnitude from a first simultaneously measured movement comprises obtaining the first vector magnitude from a lookup table.

Claim 16 (new):   The method of claim 10 wherein the

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step of storing values corresponding to the first vector

magnitude comprises storing the direction of the

resultant of the vector of the first vector magnitude.

Claim 17 (new): The method of claim 10 comprising the

step of transferring the first and second values to a

host system.

Claim 18 (new): The method of claim 17, wherein the

host system is a personal computer.

Claim 19 (new): The method of claim 16, wherein the

step of determining an activity level of the subject

takes place in the host system.

Claim 20 (new): The method of claim 10, wherein the

data used to determine the activity level consists of

values corresponding to two or more vector magnitudes at

each of a corresponding two or more times during the

time period.

Claim 21 (new):   A method of monitoring activity of a
subject comprising:

measuring, at a point on the subject, simultaneous
movement in two or more directions, at each of a
plurality of times during a time period;

calculating a plurality of vector magnitudes each
from a respective one of the simultaneously measured
movements;

storing in a memory of an activity monitor values
corresponding, respectively, to the calculated vector
magnitudes; and

transmitting at least a subset of the stored values
to a device configured to determine an activity level of
the subject.

Claim 22 (new):   The method of claim 21, wherein the
movement is measured by accelerometer, the movement
directions are orthogonal *x*-. *y*- and *z*- directions and
the vector magnitudes are determined according to the

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following expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in respective *x*-. *y*- and *z*- directions and a is the magnitude of the resultant vector of such movement.

Claim 23 (new): The method of claim 21 wherein determining the activity level comprises summing time integrals of the plurality of stored values.

Claim 24 (new): An activity monitor comprising:

a measurement unit including a plurality of motion sensors for producing respective sensor signals indicative of motion experienced thereby; and

a processor operable to receive the sensor signals from the measurement unit, and to process the sensor signals in accordance with a predetermined method,

wherein the processor is operable to process the sensor signals as respective vector components to produce a resultant vector and store values

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corresponding to the magnitude of the resultant vector

at two or more points in time,

the activity monitor being attachable to a subject

without restricting movement of the subject.

Claim 25 (new): The activity monitor of claim 24,

wherein the movement is measured by accelerometer, the

movement directions are orthogonal *x*-. *y*- and *z*-

directions and the vector magnitudes are determined

according to the following expression:

$$|a| = \sqrt{(ax^2 + ay^2 + az^2)},$$

where a_x, a_y and a_z are the movement measurements in

respective *x*-. *y*- and *z*- directions and a is the

magnitude of the resultant vector of such movement.

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